

REMARKS

Claim 1 now incorporates the subject matter of canceled claim 2, and claim 9 incorporates subject matter of canceled claim 10. Reconsideration and allowance of the subject application are respectfully requested.

Applicants note with appreciation the Examiner's withdrawal of the previous prior art rejection. Claims 1-15 stand rejected under 35 U.S.C. §103 as being unpatentable over newly-applied U.S. Patent 6,111,673 to Chang in view of previously-applied Roberts. This rejection is respectfully traversed.

Cheng discloses a network of Wavelength Division Multiplexed (WDM) links in which switching of channels between different wavelength bands is used for setting up a route for high-priority information. The Examiner admits that Chang fails to disclose a channel switching method configured "give a sufficient total quality of the transmission of the high-priority information" (quoted from claim 1). Roberts is relied upon as allegedly teaching path selection for transmitted information based upon signal quality. The Examiner concludes that it would have been obvious "for Chang to chose a preferred path based upon an improved signal qualities taught by Roberts such that a sufficient total quality transmission can be obtained." Applicants respectfully disagree.

The control device 7 in Roberts selects the path taken by optical signals, and the amount of polarization mode dispersion (PMD) to which the optical signals susceptible depends on the selected path at any given time as well as on other environmental

conditions affecting the fibers such as temperature. Roberts states at column 4, lines 42-46:

The control device 7 is operable to react to monitored data 9 from the monitor 8 so as to reroute the optical signal by appropriate actuation the cross-connects 6 in the event of the amount of PMD exceeding a predetermined threshold.

Initially, Applicants note that rerouting is not the same thing as switching or selecting different wavelength channels. Second, this text in Roberts does not teach determining the signal quality of individual WDM channels. At best, there is a general mention of determining signal quality, but no details of determining signal quality in a WDM system are given. In particular, no switches for switching between WDM channels are disclosed in conjunction with signal quality determination of the individual WDM channels.

Looking at Chang and Roberts together, Chang fails to teach the claimed quality determining device now recited in independent claim 1 to determine the quality of transmission in each of a number of wavelength bands. Nor does Chang disclose the claimed controller being coupled to the quality determining device and to a wavelength switch to select wavelength bands that transmit high priority information "to give a sufficient quality of the transmission of the high-priority information." Roberts lacks switching or selecting between different wavelength channels. Controller 7 only controls the cross connects 6 to select routes in network 4. No specific channel quality determination technique is disclosed. Nor is measuring channel quality of individual wavelength channels described. Roberts clearly states that the monitor 8 monitors optical signal degradation caused by PMD in the fibers 5. See column 4, lines 28-31. There is

no attempt in either Chang or Roberts to determine the quality of each of a number individual wavelength bands. Simply determining that PMD exists in a particular fiber is not the same thing as determining the transmission quality for individual wavelength bands. Thus, even if the combination of Roberts and Chang could be made, for purposes of argument only, that combination still fails to teach the combined features of independent claims 1 and 9.

Because each optical fiber or link carries multiple WDM channels, a person skilled in the art, having read Roberts, would at best, conclude that if the transmission quality over an optical link due to PMD is unsatisfactory, the controller device 7 would chose a different optical fiber/link. There is no teaching in Roberts of switching between WDM channels over the same optical link, and there is certainly no disclosure of determining the transmission quality over individual ones of different WDM channels of the same optical link.

The Examiner's obviousness approach runs afoul of the Federal Circuit's mandate that:

rejection of patents solely by finding prior art corollaries for the claimed elements would permit an Examiner to use the claimed invention itself as blueprint for piecing together elements in the prior art to defeat the patentability of the claimed invention. Such an approach would be an illogical and inappropriate process by which to determine patentability.

This is the very process the Examiner uses to justify the Chang-Roberts combination.

The Examiner's motivation to combine Chang and Roberts for "Chang to chose a preferred path based upon improved signal qualities taught by Roberts," mischaracterizes claims 1 and 9. Claims 1 and 9 do not recite preferred path selection, but rather recite optical switching under the control of a controller to select one of multiple wavelength bands (not paths) to transmit high priority information.

The Examiner's rejection is improper and should be withdrawn. The application is in condition for allowance. An early notice to that effect is earnestly solicited.

Respectfully submitted,

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